



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,543	06/28/2001	Takaharu Kawahara	210349US0	5132
22850	7590	05/02/2003		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER REDDICK, MARIE L	
			ART UNIT 1713	PAPER NUMBER

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/892,543	KAWAHARA ET AL.
	Examiner	Art Unit
	Judy M. Reddick	1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 19 February 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) 19 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) 1-19 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) Other: _____

DETAILED ACTION

Election/Restrictions

1. **Newly submitted claim 19 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The originally presented invention(claims 1-7 & now 1-18) is drawn to a method for producing an (saponified) ethylene-vinyl acetate copolymer VS newly presented claim 19 which is drawn to a method of further admixing a thermoplastic resin with the saponified ethylene-vinyl acetate copolymer. The inventions are separate and distinct, each from the other, as per having been related as mutually exclusive species, each not requiring the particulars of the other for patentability. Note that the originally presented invention is drawn to a one component-governed method vs. the newly presented invention, which is drawn to a two component-governed method. The product resulting from the originally inventive method is substantially different from the product resulting from the new inventive method.**

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 19 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Specification

2. **The disclosure is objected to because of the following informalities: On page 5 @ line 14, “water. And” should read “water, and” so as to engender a proper and complete sentence. On page 8 @ line 24, “distil” should read “distill” so as to engender conformance with conventional art-accepted terminology.**

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Blumberg et al(U.S. 3,513,142).

Blumberg et al disclose a method for producing a polyvinyl alcohol product of improved color wherein a vinyl ester of a 2 to 4 carbon aliphatic monocarboxylic acid, or a mixture thereof with a copolymerizable monomer, is polymerized continuously in a polymerizing zone fed by a non-aqueous stream of the vinyl ester monomer or such mixture (or a solution thereof in a solvent such as a 1-4 carbon aliphatic alcohol), which stream has been purged with an inert gas such as nitrogen to remove dissolved oxygen therefrom, and the resulting polymer is alcoholized to obtain a polyvinyl alcohol product of improved color and wherein purging of the monomer feed stream with the inert gas reduces the dissolved oxygen content to not more than about 30 ppm and preferably to not more than about 10 ppm. Polyvinyl alcohols are produced in accordance with the invention by a process wherein dissolved oxygen is continuously removed from a non-aqueous stream of a monomeric vinyl ester of a 2 to 4 carbon aliphatic monocarboxylic acid, or a mixture thereof with a monomer of the group consisting of: (a) the acrylate and methacrylate esters of 1 to 4 carbon aliphatic alcohols; (b) acrylic and methacrylic acids; (c) N-vinyl pyrrolidone; and (d) 2 to 20 carbon alpha-olefins, viz., ethylene, or a solution of such ester or such mixture thereof in a solvent which is inert towards the polymerization initiator to be used, by purging said stream with an inert gas. The purged stream is continuously fed to a polymerization zone wherein part of the monomer or monomers is polymerized in the presence

of a free radical polymerization initiator. A stream comprising unpolymerized monomer(s) and the resulting polymer is continuously withdrawn from the polymerization zone and the unpolymerized monomer(s) are separated from the polymer component of the withdrawn stream, which polymer component is then alcoholized with methanol or ethanol in the presence of an acidic or an alkaline catalyst to obtain a polyvinyl alcohol product of improved color. Generally, the amount of the comonomer employed with the vinyl ester monomer to produce such copolymers will be limited so as to yield a copolymer containing not more than about 6% of the comonomer. The aforementioned copolymers can be readily alcoholized by conventional alcoholysis. See the Abstract, cols. 3-8, the Runs and claims of Blumberg et al. Blumberg et al therefore anticipate the instantly claimed invention with the understanding that the process parameters of Blumberg et al overlap in scope with the claimed process parameters.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.***
- 2. Ascertaining the differences between the prior art and the claims at issue.***
- 3. Resolving the level of ordinary skill in the pertinent art.***
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.***

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to

th contrary. Applicant is advised of th obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. *Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumberg et al(U.S. 3,513,142).*

The disclosure of Blumberg et al for what it teaches and as applied to claims 1-15 as stated in the rejection supra. Further, the disclosure of Blumberg et al differs basically from the claimed invention as per the absence of an embodiment directed to the specifically defined (saponified)ethylene-vinyl acetate copolymer, in terms of ethylene content and melt index. However, Blumberg et al teach that the amount of comonomer employed with the vinyl ester, viz., vinyl acetate, is generally not more than about 6 wt.% of comonomer, which is a necessary implication that ethylene amounts in excess of “about 6 % by weight, including the claimed content of ethylene, are contemplated and would have been operable with the scope of patentees invention and with a reasonable expectation of success, “generally” being relative and not absolute. Moreover, the use of any commercially available ethylene-vinyl acetate copolymer in lieu of the vinyl acetate copolymer(s)of Blumberg et al would have been obvious to one of ordinary skill in the art and with a reasonable expectation of success. Criticality for such, clearly commensurate in scope with the claims, not have been demonstrated on this record.

Response to Arguments

10. *Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.*

Conclusion

11. *The additional prior art made of record and not relied upon is considered as being illustrative of the general state of the art.*

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (703)308-4346. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)892-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-8183.

J. M. Reddick
Judy M. Reddick
Primary Examiner
Art Unit 1713

JMR *JMR*
April 30, 2003